CLAIMS:

1. A method for at least inhibiting the growth of anaerobic bacteria sensitive to BLIS-producing *S. salivarius*, the method comprising contacting the sensitive bacteria with an inhibitory effective amount of a BLIS-producing *S. salivarius*, or an extract thereof, or a composition comprising said *S. salivarius* or extract thereof.

2. A method according to claim 1 wherein the anaerobic bacteria are in the oral cavity of an individual.

3. A method of prophylactic or therapeutic treatment of halitosis in an individual in need thereof, the method comprising administering to said individual a BLIS-producing *S. salivarius*, extract thereof, or composition comprising said *S. salivarius* or extract thereof, effective to at least inhibit growth of anaerobic bacteria, or in an amount to allow effective colonisation in the oral cavity of the individual by BLIS-producing *S. salivarius*.

4. A method of controlling the incidence and/or severity of halitosis, the method comprising introducing into the oral cavity of an individual susceptible to halitosis, an amount of a BLIS-producing *S. salivarius*, extract thereof, or composition comprising said *S. salivarius* or extract thereof, effective to control the incidence and/or severity of said halitosis.

5. A method according to claim 4 wherein the halitosis is caused at least in part by one or more species of anaerobic bacteria.

6. A method according to any one of claims 1 to 5 wherein the anaerobic bacteria are strains of:
   (i) black-pigmented species;
   (ii) Eubacterium; and/or
   (iii) Micromonas species.

7. A method according to claim 6 wherein the black-pigmented species are Prevotella species.

8. A method according to claim 7 wherein the Prevotella species are *Prevotella intermedia* and/or *Prevotella melaninogenica*.

9. A method according to claim 6 wherein the Eubacterium are *Eubacterium saburreum*.

10. A method according to claim 6 wherein the Micromonas are *Micromonas micros*.

11. A method according to any one of claims 1 to 10 wherein the *S. salivarius* produce one or more of Salivaricin A, Salivaricin A_1, Salivaricin A_2, Salivaricin B, or variants of any one of these.

12. A method according to claim 11 wherein the *S. salivarius* produces Salivaricin B or a variant thereof.

13. A method according to claim 12 wherein the *S. salivarius* also produces Salivaricin A_2 or a variant thereof.

14. A method according to claim 13 wherein the Salivaricin producer is *S. salivarius* strain K12, on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13084.

15. A method according to claim 13 wherein the Salivaricin producer is *S. salivarius* strain K30, on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13085.

16. A method according to any one of claims 1 to 10 wherein the *S. salivarius* extract comprises Salivaricin B or a variant thereof.

17. A method according to any one of claims 1 to 10 and 16 wherein the *S. salivarius* extract comprises Salivaricin A_2 or a variant thereof.

18. A method according to claim 16 wherein Salivaricin B or the variant is in isolated or pure form.

19. A method according to claim 17 wherein Salivaricin A_2 or the variant is in isolated or pure form.

20. A method according to any one of claims 1 to 19 wherein the composition includes a BLIS-producing *S. salivarius* or an extract thereof, in combination with a diluent, carrier and/or excipient.

21. A method according to claim 20 wherein the composition is an orally administrable composition.

22. A method according to claim 21 wherein the orally administrable composition is formulated as a lozenge, spray, mouth rinse, toothpaste, dentifrice, gargle, capsule, floss, film, chewing gum or chewable tablet.

23. A method according to claim 21 wherein the composition is formulated as a lozenge.

24. A method according to any one of claims 20 to 23 wherein the composition is in unit dosage form.

25. A method according to any one of claims 19 to 23 wherein the composition further comprises one or more secondary antibacterial agents.

26. A method according to claim 24 wherein the secondary antibacterial agent(s) are selected from bacteriocin-like inhibitory substance(s) (BLIS).

27. A method according to any one of claims 1 to 19 wherein said *S. salivarius* or extract thereof is included in a food, drink, or confectionary.

28. A method according to any one of claims 2 to 27 wherein the inhibitory or controlling effect is caused by at least partial colonisation of the oral cavity of an individual with a BLIS-producing *S. salivarius*.

29. A method according to claim 28 wherein the method includes a preliminary step of pre-treating said individual to at least reduce the bacterial population present in the oral cavity.

30. A method according to claim 28 wherein the pre-treatment comprises physical removal of bacteria and/or administration of an antibacterial agent.

31. A method according to claim 30 wherein the antibacterial agent is selected from chlorine dioxide and chlorhexidine.

32. A method according to claim 31 wherein the antibacterial agent is chlorine dioxide.

33. A method of controlling the incidence or severity of halitosis in an individual, the method comprising the steps of:

(i) scraping the tongue of the individual;

(ii) gargling or rinsing with chlorine dioxide; and

(iii) administering to the resulting bacterially depopulated oral cavity an amount of a BLIS-producing *S. salivarius*, extract thereof, or composition comprising said *S. salivarius* or extract thereof, effective to control said halitosis.

34. A method according to claim 33 which further comprises brushing with a non-chlorhexidine containing toothpaste before gargling or rinsing with chlorine dioxide.

35. A method according to claim 33 or claim 34 wherein the chlorine dioxide is mixed with water or fruit juice.

36. A method according to claim 35 wherein the chlorine dioxide is mixed with orange juice.

37. A method according to any one of claims 33 to 37 wherein the *S. salivarius* or extract thereof is administered in the form of a composition according to any one of claims 20 to 26; or a food, drink or confectionary according to claim 27.

38. A method according to claim 37 wherein the composition is in the form of a lozenge.

39. A method according to claim 38 wherein the lozenges are administered 1 to 5 times a day.

40. A method according to any one of claims 33 to 39 wherein the composition comprises a BLIS-producing *S. salivarius*.

41. A method according to claim 40 which is repeated daily for 2 to 4 days to facilitate colonisation of the oral cavity of the individual.

42. A method according to claim 41 wherein after colonisation, 1 or 2 lozenges are taken each day following ordinary tooth brushing.

43. A use of a BLIS-producing *S. salivarius* or extract thereof in the preparation of a composition for at least inhibiting the growth of anaerobic bacteria sensitive to BLIS-producing *S. salivarius*.

44. A use according to claim 43 wherein the anaerobic bacteria are in the oral cavity of an individual.

45. A use of a BLIS-producing *S. salivarius* or extract thereof in the preparation of a composition for the prophylactic or therapeutic treatment of halitosis in an individual in need thereof.

46. A use of a BLIS-producing *S. salivarius* or extract thereof in the preparation of a composition for controlling the incidence and/or severity of halitosis in an individual in need thereof.

47. A use according to claim 45 or claim 46 wherein the halitosis is caused at least in part by one or more species of anaerobic bacteria.

48. A use according to any one of claims 43, 44 and 47 wherein the anaerobic bacteria are strains of:

(i) black-pigmented species;

(ii) Eubacterium species; and/or

(iii) Micromonas species.

49. A use according to claim 48 wherein the black-pigmented species are Prevotella species.

50. A use according to claim 49 wherein the Prevotella species are *Prevotella intermedia* and/or *Prevotella melaninogenica*.

51. A use according to claim 48 wherein the Eubacterium are *Eubacterium saburreum*.

52. A use according to claim 48 wherein the Micromonas are *Micromonas micros*.

53. A use according to any one of claims 43 to 52 wherein the *S. salivarius* produce one or more of Salivaricin A, Salivaricin A_1, Salivaricin A_2, Salivaricin B, or variants of any one of these.

54. A use according to claim 53 wherein the *S. salivarius* produces Salivaricin B or a variant thereof.

55. A use according to claim 54 wherein the *S. salivarius* also produces Salivaricin A_2 or a variant thereof.

56. A use according to claim 55 wherein the Salivaricin producer is *S. salivarius* strain K12, on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13084.

57. A use according to claim 55 wherein the Salivaricin producer is *S. salivarius* strain K30, on deposit at Deutsche Sammlung von Mikroorganismen Und Zellkulturen GmbH, Braunschweig, Germany, accession number DSM 13085.

58. A use according to any one of claims 43 to 52 wherein the *S. salivarius* extract comprises Salivaricin B or a variant thereof.

59. A use according to any one of claims 43 to 52 and 58 wherein the *S. salivarius* extract comprises Salivaricin A_2 or a variant thereof.

60. A use according to claim 58 wherein Salivaricin B or variant is in isolated or pure form.

61. A use according to claim 59 wherein Salivaricin A_2 or variant is in isolated or pure form.

62. A use according to any one of claims 43 to 61 wherein the composition further comprises a diluent, carrier and/or excipient.

63. A use according to claim 62 wherein the composition is formulated for oral administration.

64. A use according to claim 63 wherein the composition is formulated as a lozenge, spray, mouth rinse, toothpaste, dentifrice, gargle, capsule, floss, film, chewing gum or chewable tablet.

65. A use according to claim 64 wherein the composition is formulated as a lozenge.

66. A use according to any one of claims 62 to 65 wherein the composition is in unit dosage form.

67. A use according to any one of claims 62 to 66 wherein the composition further comprises one or more secondary antibacterial agents.

68. A use according to claim 67 wherein the secondary antibacterial agent(s) are selected from bacteriocin-like inhibitory substance(s) (BLIS).

69. A use of a BLIS-producing *S. salivarius* or extract thereof wherein said *S. salivarius* or extract is included in the preparation of a food, drink, or confectionary.

70. A use according to any one of claims 44 to 69 wherein the inhibitory or controlling effect is caused by at least partial colonisation of the oral cavity of an individual with a BLIS-producing *S. salivarius*.